Doc. Ref.: AQ54

## PATENT ABSTRACTS OF JAPAN

(11)Publication number:

05-175730

(43) Date of publication of application: 13.07.1993

(51)Int.CI.

H03D 1/00 H03D 1/06 H03D

H04B

(21)Application number : **03-342772** 

(22)Date of filing:

25.12.1991

(71)Applicant: FUJITSU TEN LTD

(72)Inventor: SASAKI KAZUTOSHI SASAKI MITSURU

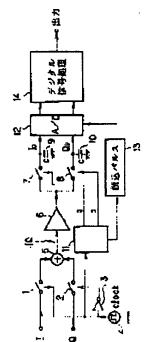
## (54) TIME DIVISION DIRECT RECEIVER

## (57) Abstract:

PURPOSE: To reduce the distortion at demodulation by selecting alternately any of two signals subject to orthogonal transformation and whose phases differ by 90°, adding, synthesizing them and amplifying the result, separating the result into two signals being early and late signals timewise and replacing alternately the relation of the preceding and succeeding signals.

CONSTITUTION: Two signals I, Q subjected to orthogonal transformation and whose phases differ by 90° are switched alternately by 1st switches 1,2, and they are added and synthesized (IQ). The synthesized signal IO is amplified at an amplifier 6 to prevent a difference from the amplification factor and the phase of the two signals. The synthesis signal IQ amplified by the amplifier 6 is subjected to orthogonal transformation through 2nd switches 7, 8 and extracted separately as signal pairs I0, Q0, stored respectively to capacitors 9, 10 and read by an A/D converter 12. The switches 7, 8 are switched so that the relation of timewise precedence/succession of the separated signals (a), (b) is alternately replaced by a return signal generating section 11. As a result, the separation signals (a), (b) whose relation of timewise precedence/succession is alternately replaced are demodulated at a digital

signal processing section 14. Thus, the distortion of the signals is less than that of the signals relation of timewise precedence/succession is fixed.



## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the

examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of

rejection]

[Date of requesting appeal against examiner's decision of

rejection]

[Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office